

Wauconda CUSD 118 | Math Curriculum Map Template

Grade Level: 6

Unit Title: Ratios and Rates

IDENTIFIED STANDARDS AND ESSENTIAL QUESTIONS

Essential Question(s)

1. How can you describe how two quantities are related?

Illinois State Standards

Priority Standards

(NUMBER & LANGUAGE)

Supporting Standards

6.RP.A.1: Understand the concept of a ratio and use ratio language to describe a ratio relationship between two quantities. For example, "The ratio of wings to beaks in the bird house at the zoo was 2:1, because for every 2 wings there was 1 beak." "For every vote candidate A received, candidate C received nearly three votes."

6.RP.A.2:
Understand the concept of a unit rate a/b associated with a ratio $a:b$ with $b \neq 0$, and use rate language in the context of a ratio relationship. For example, "This recipe has a ratio of 3 cups of flour to 4 cups of sugar, so there is $\frac{3}{4}$ cup of flour for each cup of sugar." "We paid \$75 for 15 hamburgers, which is a rate of \$5 per hamburger."¹

6. RPA.A.3:
Use ratio and rate reasoning to solve real-world and mathematical problems, e.g., by reasoning about tables of equivalent ratios, tape diagrams,

<p>double number line diagrams, or equations. a. Make tables of equivalent ratios relating quantities with whole-number measurements, find missing values in the tables, and plot the pairs of values on the coordinate plane. Use tables to compare ratios. b. Solve unit rate problems including those involving unit pricing and constant speed. For example, if it took 7 hours to mow 4 lawns, then at that rate, how many lawns could be mowed in 35 hours? At what rate were lawns being mowed? c. Find a percent of a quantity as a rate per 100 (e.g., 30% of a quantity means 30/100 times the quantity); solve problems involving finding the whole, given a part and the percent. d. Use ratio reasoning to convert measurement units; manipulate and transform units appropriately when multiplying or dividing quantities.</p>	
Priority Instructional Objectives	Supporting Instructional Objectives
<ol style="list-style-type: none">1. I can show a ratio relationship between two quantities using different representations, and describe the relationship using correct mathematical language.2. I can represent a collection of equivalent ratios and show the ratio relationship between two quantities using tables of equivalent ratios and double number lines.3. I can represent a collection of equivalent ratios as ordered pairs and graph the ratio relationship on the coordinate plane.4. I can compare ratio relationships	

that are shown using different representations.

5. I can solve real-world problems involving ratio relationships by using bar diagrams, double number lines, and equivalent ratios.
6. I can use ratio reasoning to convert between customary units of measurement.
7. I can understand how a rate is related to a ratio, and use ratio and rate reasoning to find a unit rate.
8. I can solve real-world problems involving rates and unit rates by using bar diagrams, double number lines, and equivalent rates.

Core Resources

McGraw Hill Reveal Math (Physical and Digital)

Enrichment/Extensions/Interventions

ALEKS Program: Individualized Learning Pathways